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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/087,131	03/01/2002	James R. Fore SR.	4287-014	4398	
24112	7590 06/23/2004		EXAM	NER	
COATS & BENNETT, PLLC			MASINICK, MICHAEL D		
P O BOX 5 RALEIGH, NC 27602			ART UNIT	PAPER NUMBER	
				TA EX NOMBER	
			2125 DATE MAILED: 06/23/2004	, 12	

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary 10/087,131			Applicati	on No	Applicant(c)	
Examiner	•	•			Applicant(s)	
Michael D Masinick 2125 Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. THE MAILING DATE OF THIS COMMUNICATION. If the period for reply specified doors is less ban bidly (30) days, a reply within the statistory minimum of thing (30) days will be considered timely. If the period for reply specified shows the maniform statistory profestion agries will will be considered timely. If the period for reply specified shows the maniform statistory profestion agries will be decided to the communication. If the period for reply specified shows the maniform statistory profestion agries will be decided to the considered timely. If NO period for reply is specified shows the maniform statistory profestion agries will be decided to the communication. If the period for reply is specified shows the maniform statistory profestion agries will be decided timely. If NO period for reply is specified shows the maniform statistory profestion and set of this communication. Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any sealing and the considered timely. If NO period the manifest is applicated in a constitution for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims Alpication of the above claim(s) is/are allowed. Signature of the above claim(s) is/are allowed. Claim(s) and E-20 is/are rejected. The claim(s) are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on	Office Action Summany					
The MAILING DATE of this communication appears on the cover sheet with the correspondence address—Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. Extensions of time may be available under the provision of 3 CFR 1.136(c). In ceivent, however, may a reply be timely filed after SEX (5) MONTH'S from the mailing date of this communication. The provision of time may be available under the provision of 3 CFR 1.136(c). In ceivent, however, may a reply be timely filed and sEX (5) MONTH'S from the mailing date of this communication. The provision of the p		omec Action Guilliary				
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1) ⊠ Responsive to communication(s) filed on 26 November 2003. 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final. 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) ☒ Claim(s) 1-20 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) ☐ Claim(s) is/are allowed. 6) ☒ Claim(s) 7 is/are objected to. 8) ☐ Claim(s) 7 is/are objected to. 8) ☐ Claim(s) 7 is/are objected to. 8) ☐ Claim(s) 7 is/are objected to by the Examiner. 10 ☐ The drawing(s) filed on is/are: a accepted or b) ☐ objected to by the Examiner. Application Papers 9) ☐ The specification is objected to by the Examiner. 10 ☐ The drawing(s) filed on is/are: a accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☐ All b) ☐ Some * c) ☐ None of: 1. ☐ Certified copies of the priority documents have been received in Application No 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). *See the attached detailed Office action for a list of the certified copies not received. Attachment(e) 1) ☐ Notice of References Cited (PTO-892) 2) ☐ Notice of Draitspersoon's Patent Orawing Review (PTO-948) 3) ☐ Normicon Informal Patent Application (PTO-152)	THE I - Exter after - If the - If NO - Failur Any r	MAILING DATE OF THIS COMMUNICATION SIGNS OF STATES OF THIS COMMUNICATION OF SIX (6) MONTHS from the mailing date of this communication of reply specified above is less than thirty (30) or period for reply is specified above, the maximum statute to reply within the set or extended period for reply will eply received by the Office later than three months after	ATION. 37 CFR 1.136(a). In no evication. 49ys, a reply within the statiory period will apply and w 1, by statute, cause the app	ent, however, may a reply be tutory minimum of thirty (30) d rill expire SIX (6) MONTHS fro blication to become ABANDON	timely filed ays will be considered time the mailing date of this LED (35 U.S.C. § 133).	ely. : communication. :
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DETAILED ACTION

This office action is in response to the office action filed November 26, 2003. Petition to revive this case was granted.

Response to Arguments

In response to applicants arguments that the configurable controller of Bhatnagar is not portable, examiner points specifically to Column 3, paragraph 45 which states "The said user interface circuitry is configurable for receiving user input through an infrared/ultrasonic/radio-frequency remote entry device...". This statement clearly shows that the main controlling system of Bhatnagar which is not, nor was ever claimed to be portable, is configurable to be used with a portable device. Examiner is not asserting that the main controller of Bhatnagar is portable, but that the configurable controller of Bhatnagar can be configured to receive input from a portable device. This portable device clearly reads on the claims of being able to transmit at least one command to the controller.

1. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5

USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, paragraph 0001 of Bhatnagar states "The applications range from the control of appliances to implementation of control functions in **commercial**, **industrial**, and automotive

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environments." Applicants attempts to paint Bhatnagar as strictly a non-portable controller of household appliances is blatantly false. The statement above also clearly serves as motivation to combine the references as Bhatnagar "...provides a configurable way to provide flexibility and optimization of control in the intended application, at a low cost" as previous stated as a reason to combine the references. Examiner notes that it is the Bhatnagar reference that uses the phrase "at a low cost". The examiner is not going to argue the merits of this statement as it relates to the combination of these references, however, it is another clear reason to combine because it was found within the references themselves.

- 2. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).
- 3. Specifically regarding claim 17, applicant asserts that one skilled in the art of wire winding machines would not have considered programming over a network to be obvious. This is not the criteria by which the combination of references is to be judged. While the main focus of the current application is wire winding machines, the actual subject matter of the current claims is directed to network based control of an industrial system. One skilled in the art of computer control would easily have understood the concepts of network based control as it has been popular for many decades.

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4. Applicant later asserts that the field of endeavor of the current application is wire winding machines and not electronic controllers. This is confusing to the examiner considering the claims are all directed to electronic controllers.

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- In response to applicant's argument that Bhatnagar is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992).
- 6. A person of ordinary skill would have turned to Bhatnagar in order to provide the portability and network control of the controller that was already present in the Vander Groef reference.
- 7. Applicant states that Bhatnagar does not solve the wire winding problems that confronted the applicant in this case yet goes on to state that "The problem confronted by Applicant in this case was transferring information in an effective and efficient way to a wire winding machine." It is clear from reading just the abstract and the first column of Bhatnagar that this is the exact problem that this patent application is interested in solving.
- 8. All claims stand as previously rejected with the additional explanations given above.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

- 2. Claims 1-4, 6, 8-13, 15-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S Patent No 5,499,775 to Vander Groef in view of Patent Publication 2001/0039190 by Bhatnagar.
- 3. Regarding claims 1 and 12, Vander Groef shows a wire winding machine comprising: at least one wire winding mandrel for winding wire thereon; a traverse for directing wire axially along each said mandrel; a controller for coordinating the axial position of said traverse with the radial position of each said mandrel to wind wire onto said mandrel in a predetermined package.
- 4. This system is well documented in the background of the invention in relation to the citation of the Vander Groef patent on page 2 of the specification.
- 5. Vander Groef does not show the use of a portable operator console associated with said controller in data transfer relationship; said console operative to receive from an operator at least one command related to a wire winding procedure and transmit said command to said controller.
- 6. Bhatnagar shows a configurable electronic remote control system for interfacing a user with a network or directly with other various control devices (Abstract, Paragraphs 0006 and 1107).
- 7. It would have been obvious to one of ordinary skill in the art at the time of invention to use the configurable remote system of Bhatnagar to recreate the operator console of Vander Groeff as a portable console because (paragraph 0001) it provides a configurable way to provide flexibility and optimization of control in the intended application, at a low cost.
- 8. Regarding claim 2, Vander Groef shows an operator station connected to the controller containing buttons and a keypad for submitting information and commands to the controller. By

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combining this system with Bhatnagar, a remote operator station would have these same controls and buttons and have the same operating ability as the station connected directly to the machine.

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- 9. Regarding claim 3, Vander Groef shows prompting the user for input (Col 7, line 46).
- 10. Regarding claim 4, Vander Groef shows an operating panel including at least one button and at least one indicator, and a data terminal comprising at least a keypad and an alphanumeric display (Col 7 lines 15-21 and Col 7 lines 34-45).
- 11. Regarding claim 6, Vander Groef shows a safety interlock wherein said wire winding procedure, when halted at predetermined points, proceeds only upon an affirmation actuation of the safety interlock by an operator (Claim 20 shows the use of predetermined points where a user must interact with the system using start and stop buttons. The start and stop buttons on the console are enabled with a safety lock which confirms that "affirmation actuation" by the operator).
- Regarding claim 8, Vander Groef shows wherein the operating parameter comprises at least one of wire speed, length of wire per winding, constant velocity or constant RPM mode of operation, wire guage, wire tension, wire winding profile, and traverse position to angular mandrel position data (Col 7, lines 42-62).
- 13. Regarding claim 9, Vander Groef shows the use of an input device (keypad as discussed with regard to claim 4).
- 14. Regarding claim 10, Bhatnagar shows the use of an LED display (paragraph 0006).
- 15. Regarding claim 11, Bhatnagar shows the use of Bluetooth as the communications medium (paragraph 0056).

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16. Regarding claim 13, Bhatnagar shows wherein the remote interface comprises a network interface, said network interface being connected to a data communications network (Figure 13), and said at least one remote data terminal comprises at least one computer connected in a data communications relationship with said digital data communications network (paragraph 0017).

- 17. Regarding claim 15, Bhatnagar shows the use of Bluetooth as the communications medium (paragraph 0056).
- 18. Regarding claim 16, Bhatnagar shows that the network is an Ethernet LAN. Paragraph 0053 states a TCP/IP network, of which an Ethernet network is one kind. This would be inherent to any current TCP/IP network.
- 19. Regarding claim 17, It has been shown that Bhatnagar shows a network for the transfer of data to the controller. Vander Groef clearly shows the ability to take data to program the operation of the wire winding machine. Examiner notes that it would have been an obvious step to one skilled in the art to have the data of Vander Groef retrieved off of the network rather than an internal hard drive or other storage device by methods well known by those skilled in the art.
- 20. Regarding claim 18, see rejection of claims 1 and 12.
- 21. Regarding claim 19, see rejection of claim 3 above.
- 22. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S Patent No 5,499,775 to Vander Groef in view of Patent Publication 2001/0039190 by Bhatnagar as shown above and further in view of U.S. Patent No. 6,009,164 to Yun.
- 23. Vander Groef in view of Bhatnagar as shown above does not show the ability to remove the data terminal from the console.

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24. Yun shows a telephone with a detachable keypad for data entry.

25. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the removable keypad as shown in Yun in the console of Vander Groef in view of Bhatnagar because removable keypads provide the ability to clean, upgrade, or prevent unauthorized use (Col 1, lines 16-41).

26. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S Patent No 5,499,775 to Vander Groef in view of Patent Publication 2001/0039190 by Bhatnagar as shown above and further in view of U.S. Patent No. 6,377,571 to Tai.

- 27. Vander Groef in view of Bhatnagar as shown above does not show the use of the IEEE 802 LAN/MAN network standard.
- 28. Tai shows a virtual model using IEEE 802 standards. The use of standards is well known in the art to allow all manufacturers of devices to work together to better the communications between devices.
- 29. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the IEEE 802 standards as shown in Tai in the network of Vander Groef in view of Bhatnagar because they are standards and would allow for interconnection of other standard devices.

Allowable Subject Matter

30. Claim 7 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

While Vander Groef and Bhatnagar show a system for safely actuating the controls of a wire winding facility using a safety switch and a remote controlled system, neither of these references taken alone or in combination with the prior art of record disclose the use of a portable foot switch as the safety interlock. It is this portable footswitch safety interlock system, in combination with the remaining elements and features of the invention, that the applicant's invention defines over the prior art of record.

Conclusion

32. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure and to the state of the art at the time of invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael D Masinick whose telephone number is (703) 305-7738. The examiner can normally be reached on Mon-Fri, 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo Picard can be reached on (703) 308-0538. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-7239 for regular communications and (703) 746-7239 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

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mdm June 4, 2004

L.P.P.H

LEO PICARD SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 2100